

Serial Number 10/617,796

AMENDMENTS TO DRAWINGS

Please amend Fig. 2 by changing the caption for element 25 to read ~~–PIEZOELECTRIC–~~ rather than “PIEZDELECTRIC,” and by changing the caption for element 23 to read ~~–AMPLIFYING–~~ rather than “AMPLYING,” as marked in red on the attached ANNOTATED SHEET and included in the attached REPLACEMENT SHEET.

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Amendments to Claims and Drawings

Claim 1 has been amended to recite that the amplifying device includes an NPN transistor and the respective connections of the transistor's emitter, collector, and base. The NPN transistor is transistor Q2, illustrated in original Fig. 3, and therefore the amendment does **not** involve "new matter."

Even though the connections of the various transistor electrodes are illustrated in Fig. 3 and do not constitute new matter, it is noted that they were not explicitly mentioned in the original specification. Therefore, page 4 of the specification has been amended to explicitly mention the connections and therefore provide proper antecedence in the specification for the claimed subject matter.

In addition, the drawings have been amended to correct two typographic errors. Because the changes to the drawings are formal in nature, it is respectfully submitted that the changes also do not involve new matter.

2. Rejection of Claims 1-3 and 5 Under 35 USC §103(a) in view of U.S. Patent No. 4,641,053 (Takeda) and U.S. Patent Publication No. 2003/0127535 (Adiga)

This rejection is respectfully traversed on the grounds that the Takeda patent and Adiga publication fail to disclose or suggest a nebulizer with an amplifying device, as claimed. Furthermore, the Takeda patent and Adiga publication fail to disclose a nebulizer with an amplifying device that utilizes an NPN transistor in the manner claimed. Use of an amplifying device as claimed provides significantly increased droplet volume with a relatively simple and inexpensive structure.

It is true that the Takeda patent discloses a transistor 21. However, transistor 21 of Takeda does not function as an amplifier, but rather is a voltage limiter, as explained in col. 3, line 67 to col. 4, line 22. The nebulizer of Takeda does not include, or suggest a need for, any sort of amplifier.

Since the Takeda patent does not disclose any sort of amplifier, much less the claimed amplifier, and the Adiga publication does not disclose any sort of vibration generating circuit, it is respectfully submitted that neither the Takeda patent nor the Adiga publication, whether considered individually or in any reasonable combination, could possibly have suggested the claimed invention to the person of ordinary skill in the art, and withdrawal of the rejection of claims 1-3 and 5 under 35 USC §103(a) is respectfully requested.

3. Rejection of Claim 4 Under 35 USC §103(a) in view of U.S. Patent Nos. 4,641,053 (Takeda), 5,136,199 (Kawai), and 4,338,576 (Takahashi), and U.S. Patent Publication No. 2003/0127535 (Adiga)

This rejection is respectfully traversed on the grounds that the Kawai and Takahashi patents, like the Takeda patent and Adiga publication, fail to disclose or suggest a nebulizer with a transistor amplifying device, as claimed.

The Kawai patent discloses a piezoelectric vibrator that includes transistors 18 and 20, but the transistors 18 and 20 are used as switching transistors of a driving circuit for windings 21a and 21b connected to the vibrator, and do not provide any amplification function. In addition, Kawai's vibrator is designed to vibrate a mirror in order to remove water drops without cracking the mirror (col. 1, lines 23-35), rather than as the driver of a nebulizer.

On the other hand, the Takahashi patent discloses a nebulizer with a transistor 13 that serves as a switching transistor for the oscillator 10. Like the nebulizers of Takeda and Adiga, the nebulizer does not include any sort of amplifier.

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Because the Takeda, Kawai, and Takahashi patents, and the Adiga publication, fail to disclose or suggest the claimed transistor amplifier circuit of a nebulizer, withdrawal of the rejection

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC

A handwritten signature in black ink, appearing to read 'B. Urcia', with a long horizontal line extending to the right.

By: BENJAMIN E. URCIA
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ANNOTATED MARKED-UP DRAWING SHEET

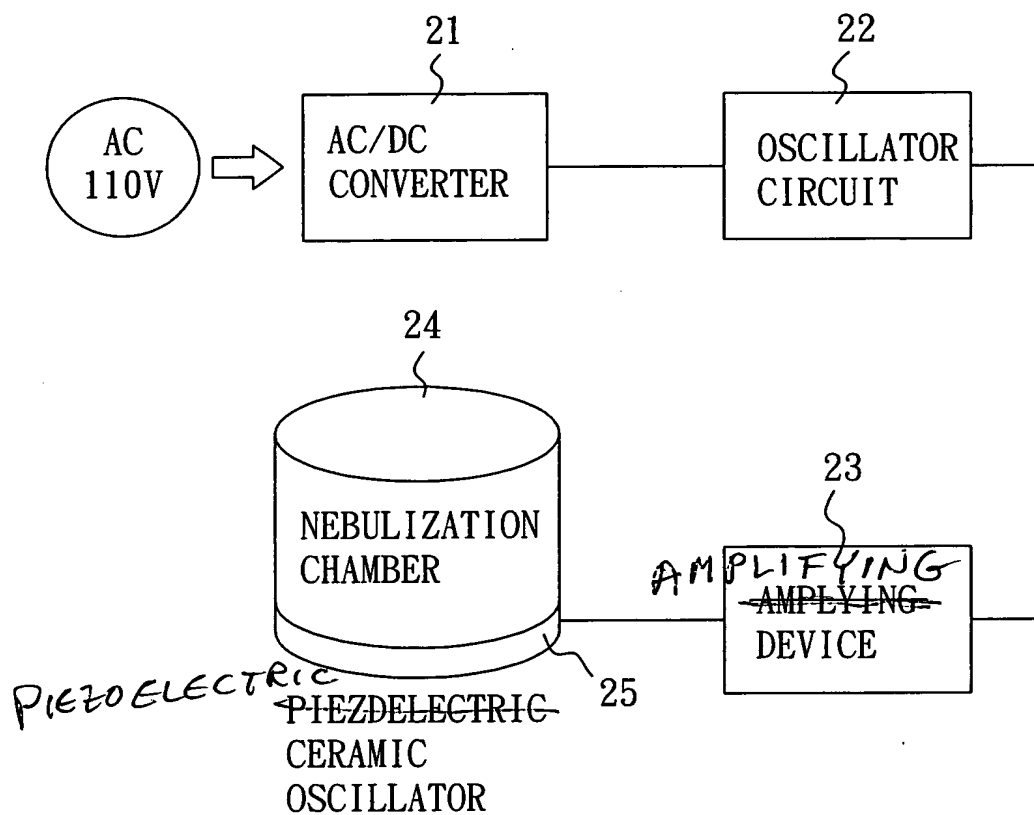


FIG. 2